U.S. Department of Transportation
United States Coast Guard

Commandant
United States Coast Guard

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Washington, DC 20593-0001
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COMDTINST 6260.21B
22 OCT 1993

COMMANDANT INSTRUCTION 6260.21B

Subj: HAZARD COMMUNICATION FOR WORKPLACE MATERIALS

Ref: (a) U.S. Department of Labor, Occupational Safety and Health Administration, Hazard Communication Standard (29 CFR 1910.1200)
(b) American Conference of Governmental Industrial Hygienists, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices

1. PURPOSE. This instruction reinforces, consolidates, and updates the requirements for the collection and communication of workplace hazardous materials information. These requirements apply to all Coast Guard units.

2. ACTION. Area and district commanders; commander, maintenance and logistics commands, commanding officers of Headquarters units; Commander, Coast Guard Activities Europe; and chiefs of offices and special staff divisions at Headquarters shall ensure compliance with the provisions of this instruction.

3. DIRECTIVES AFFECTED. COMDTINST 6260.21A is canceled.

4. BACKGROUND.

   a. Nationwide, there is concern among employees to know which hazardous materials are present in their workplace, and what methods are being taken to protect them from unhealthful chemical exposures. To address this concern, the Occupational Safety and Health Administration (OSHA) issued the Hazard Communication

Standard (reference (a)). This standard, which is applicable to the Coast Guard, requires that employers initiate and comply with a hazard communication program for employees that consists of:

(1) An inventory of the hazardous materials which you would reasonably expect to encounter in the workplace;

(2) Data sheets providing information regarding the hazards presented, protective measures to be taken and emergency first aid procedures to be followed for each hazardous material;

(3) Information labels on all hazardous material containers;

(4) Specific training about how to use this information; and

(5) A written program which sets forth how the employer will provide the above information and training.

b. Facilities required to have Material Safety Data Sheets (MSDSs) available under the OSHA Hazard Communication Standard are subject to certain requirements under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986. Section 311 requires submission of the MSDSs or a list of the products/chemicals to local emergency planning committees, appropriate State emergency response agencies, and local fire departments. Further policy concerning SARA requirements will be provided in a separate directive.

5. SCOPE. This instruction applies to all Coast Guard units whose personnel use or are exposed to hazardous materials in the workplace. This instruction also applies to units, such as those actively engaged in marine safety activities, whose personnel do not use but may be exposed to hazardous materials or their by-products in the workplace. For purposes of this instruction only, the term exposure is defined as coming in physical contact with a hazardous material, whether through contact with skin, inhalation or ingestion, without regard to the use of personal protective equipment. All forms of a material may be involved, including liquid, vapor, gas, solid, dust, mist and fume. The provisions of this instruction do not apply to office workers, unless their job performance routinely involves exposure to hazardous chemicals. Common household consumer products, such as detergents, bleach, waxes, furniture polish, window cleaner, etc., are excluded from the requirements of this instruction provided they are used in the same manner and quantities as would be expected in their typical consumer applications. For the purposes of this

instruction, hazardous materials also do not include ammunition, weapons, explosives, explosive actuated devices, propellants, pyrotechnics, pharmaceutical supplies or radioactive materials.

6. REQUIREMENTS.

a. Hazardous Materials Coordinator. Coast Guard units which have personnel who use or may be exposed to hazardous materials or their by-products in the workplace shall appoint in writing a hazardous materials coordinator who shall develop a hazard communication program. The hazardous materials coordinator shall have functional responsibility for the hazard communication program.

b. Program Elements. The hazard communication program shall contain the following program elements:

(1) Material Safety Data Sheets (MSDSs). A MSDS must be obtained for each hazardous material in the workplace. Enclosure (1) contains a sample MSDS and enclosure (2) contains the general categories of materials or by-products to which Coast Guard personnel may be exposed and which are considered hazardous. MSDSs are the primary means for communicating the hazards of workplace materials and must be accessible to personnel in their workplace. The DOD Hazardous Materials Information System (HMIS), which currently contains over 60,000 MSDSs, shall be the primary source for obtaining this information. Units not having access to the DOD HMIS on local computer hardware shall contact their respective MLC (k) to obtain a HMIS MSDS. For products not available in the DOD HMIS, a MSDS must be obtained directly from the manufacturer or supplier of the material. The format of the MSDS may vary. As a minimum, a MSDS shall provide information regarding the hazards presented, protective measures to be taken and emergency first aid procedures to be followed for a hazardous material. Chemical Hazard Response Information System (CHRIS), Volume II (COMDTINST M16465.12(series)) data sheets are acceptable for meeting the hazard communication requirements of marine safety units.

(2) Hazardous Materials Inventory List. Each unit shall develop a hazardous materials inventory list. As a minimum, this list must include Coast Guard unit name, product name, manufacturer's name and address, FSN/NSN, and use location for all hazardous materials in the workplace. For units engaged in marine safety activities, include all bulk chemicals or materials routinely or most frequently encountered in your zone

or carried by vessels inspected by your office, with special emphasis on carcinogenic or highly toxic materials. The hazardous materials inventory list must be updated annually.

(3) Written Program. A written hazard communication program is required at each unit. As a minimum, this written program must address all required program elements. In addition, the written program must include the hazardous materials inventory list. Enclosure (3) contains a sample, fill in the blanks, written program for a unit.

(4) Container Labels. This program element applies to units who use hazardous materials in the workplace. Reference (a) requires manufacturers and suppliers of hazardous materials to label product containers with specific warning information. All hazardous materials received for use must be checked for labels or tags which, as a minimum, provide the following information:

(a) Name of the material as indicated on the MSDS;

(b) Warning of the principal hazards (e.g., health, fire, reactivity, etc.);

(c) Effects of overexposure on target body organs (e.g., skin, eyes, liver, kidneys, etc.); and

(d) Name, address or location of the manufacturer, supplier, or a responsible party who can provide additional information.

(5) Approval for Small Purchase of Hazardous Materials. In accordance with COMDTINST M4200.13(series), Small Purchase Handbook, approval is required from the Hazardous Materials Coordinator for the purchase of hazardous materials. The command shall use the following approval guidelines:

(a) a MSDS for the material to be acquired shall be available to the unit; and

(b) the command shall have, and be trained in the use of, all personal protective equipment required for use of the material as spelled out on the MSDS.

7. Training.

a. Hazardous Materials Coordinator. The training offered by Commandant (G-K) for unit safety supervisors, and by Commandant (G-M) for collateral duty safety and health

coordinators provides recipients with the skills necessary to carry out the duties of a unit hazardous materials coordinator. This training is conducted on a periodic basis, and is announced by Commandant notice.

b. Each employee shall receive information and training on the elements of the hazard communication program. Personnel shall receive this training when first reporting to or being hired at a unit, whenever there is a change in duties which will involve new hazards and whenever new hazards become associated with the same duty. Refresher training shall be provided annually. As a minimum, this information and training will cover:

(1) An overview of the elements of the Coast Guard hazard communication program;

(2) The location of the written program, hazardous materials inventory list and MSDSs;

(3) Contents of MSDS with emphasis on:

(a) work operations where material is used;

(b) hazards presented;

(c) safe work practices required;

(d) protective measures to be taken;

(e) emergency first aid procedures to be followed; and

(f) interpretation of hazardous material labels.

c. The Federal Hazard Communication Training Program (DOD INST 6050.5-G-1) may be used to provide unit hazard communication training. This multi-media presentation, as well as additional guidance in developing a unit program, can be obtained from MLC (k).

d. Training, including an overview of subjects covered, shall be documented in the unit training records and in individual USCG Training Records.

8. Implementation.

a. Marine Safety Commands.

(1) Hazard communication requirements apply to all marine safety units. Implementation requires a slightly different approach to avoid unnecessary work load and to focus on high risk activities. Units shall identify specific high hazard/high risk materials routinely

encountered (as described above) and provide appropriate hazard communication training as required. At a minimum this training shall be given for the following materials:

(a) those chemicals listed in 46 CFR 151, Subchapter 0;

(b) chemicals which are carcinogens (see reference (b); and

(c) suspected carcinogens and highly toxic materials, especially those requiring restricted gauging and materials having Threshold Limit Values less than 100 parts per million (ppm) (see enclosure 4).

(2) It may be possible to cover other less hazardous materials routinely encountered from a categorical standpoint. Examples are alcohols, petroleum hydrocarbons or chlorinated hydrocarbons, and shipyard hazards such as asbestos, welding fumes, sandblasting dust, etc.

(3) As requested, provide assistance to commands with the approval of hazardous material small purchases.

b. Non-Routine Tasks. The performance of non-routine tasks is included in the scope of the hazard communication program. The potential for exposure to hazardous materials must be anticipated prior to beginning work on such projects. The supervisor of the non-routine task is responsible for ensuring employees receive appropriate hazard information. This may be a frequent occurrence in marine safety activities since shipment of bulk chemicals can be very unpredictable.

c. On-site Contractors. Coast Guard units will provide MSDS information to contractors whose employees perform work activities within unit facilities if hazardous materials are provided by the Coast Guard. Information provided shall be sufficient to enable contractors to satisfy their hazardous communication responsibilities.

9. RESPONSIBILITIES.

a. Commanders of maintenance and logistics commands (MLC(k)) shall:

(1) Assist units in obtaining Material Safety Data Sheets (MSDSs) for each hazardous material in the workplace;

(2) Assist units in obtaining the Federal Hazard Communication Training Program and in providing the required training; and

(3) Provide requested assistance to commands with the approval of hazardous material small purchases.

b. Units attached to a Group. Group commanders shall designated in writing a hazardous materials coordinator who will assist subordinate units within the group in the development and implementation of a hazard communication program that meets the program element requirements of this instruction. Groups and support centers shall be responsible for providing assistance to local vessels. This assistance shall include helping to obtain Material Safety Data Sheets, helping to develop consistent vessel hazardous communications programs, and coordinating local training where such coordination would reduce the number of individual training sessions.

c. Other Units. Unit commanding officers, including reserve units whose personnel use or may be exposed to hazardous materials or their by-products in the workplace, shall designate in writing a hazardous materials coordinator and ensure that a hazard communication program meeting the program element requirements of this instruction is implemented.

d. District Industrial Hygienists, as duties permit, shall:

(1) assist units in developing a written hazard communication plan, and

(2) assist units in providing the initial and annual refresher hazard communication training to each employee.

/s/ ALAN M. STEINMAN
Chief, Office of Health and Safety

Encl: (1) Sample DOD HMIS Material Safety Data Sheet
(2) General Categories of Hazardous Materials and By-products Found at Coast Guard Units
(3) Sample Written Hazard Communication Program
(4) List of Bulk Chemicals Considered to be Highly Toxic

Enclosure (1) to COMDTINST 6260.21B

DOD Hazardous Materials Information System
DOD 6050.5-L
AS OF 30 SEP 91
For U.S. Government Use Only

FSC: 6810
NIIN: 002815272
Manufacturer's CAGE: 1B464
Part No. Indicator: A
Part Number/Trade Name: BENZENE

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General Information

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Item Name: BENZENE, TECHNICAL
Manufacturer's Name: FISHER SCIENTIFIC CO; CHEMICAL MFG DIV
Manufacturer's Street: 1-REAGENT LANE
Manufacturer's P.O. Box: N/K
Manufacturer's City: FAIR LAWN
Manufacturer's State: NJ
Manufacturer's Country: U.S.
Manufacturer's Zip Code: 07410-2802
Manufacturer's Emerg Ph #: 201-796-7100
Manufacturer's Info Ph #: 201-796-7100
Distributor/Vendor # 1: N/R
Distributor/Vendor # 1 Cage:
Distributor/Vendor # 2:
Distributor/Vendor # 2 Cage:
Distributor/Vendor # 3:
Distributor/Vendor # 3 Cage:
Distributor/Vendor # 4:
Distributor/Vendor # 4 Cage:
Safety Data Action Code:
Safety Focal Point: D
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 004
Status: SM
Date MSDS Prepared: 01JUL88
Safety Data Review Date: 23FEB89
Supply Item Manager: CX
MSDS Preparer's Name: N/K
Preparer's Company:
Preparer's St. Or P. O. Box:
Preparer's City:
Preparer's State:
Preparer's Zip Code:
Other MSDS Number:
MSDS Serial Number: BDTBB
Specification Number: VV-B-231
Spec Type, Grade, Class: GRADE

Hazard Characteristic Code: F3
Unit of Issue: GL
Unit of Issue Container Qty: 1.0 GL
Type of Container: CAN
Net Unit Weight: 1.0 GL
NRC/State License Number: N/R
Net Explosive Weight:
Net Propellant Weight-Ammo: N/R
Coast Guard Ammunition Code:

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Ingredients/Identity Information

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Ingredient: BENZENE
Ingredient Sequence Number: 01
Percent: 99.0
Proprietary: NO
Ingredient Action Code:
Ingredient Focal Point: D
NIOSH (RTECS) Number: CY1400000
CAS Number: 71-43-2
OSHA PEL: 1PPM/5STEL; 1910.1028
ACGIH TLV: 10 PPM; A2; 8990
Other Recommended Limit: N/R

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Ingredient: OTHER CONTAMINANTS (NON-AROMATICS; 1 ppm THIOPHENE)
Ingredient Sequence Number: 02
Percent: 0.15
Proprietary: NO
Ingredient Action Code:
Ingredient Focal Point: D
NIOSH (RTECS) Number: 1003292OC
CAS Number: N/K
OSHA PEL: N/K
ACGIH TLV: N/K
Other Recommended Limit: N/K

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Physical/Chemical Characteristics

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Appearance And Odor: COLORLESS TO LIGHT YELLOW LIQUID WITH AN AROMATIC ODOR.
Boiling Point: 176F/80C
Melting Point: 42F/6C
Vapor Pressure (MM Hg/70 F): 74.6
Vapor Density (Air=1):
Specific Gravity: 0.877
Decomposition Temperature:
Evaporation Rate And Ref: 1.0 (CCL*4=1)
Solubility In Water: NEGLIGIBLE

Percent Volatiles By Volume: 100.0
Viscosity:
pH:
Radioactivity:
Form (Radioactive Matl):
Magnetism (Milligauss):
Corrosion Rate (IPY):
Autoignition Temperature: 928F

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Fire and Explosion Hazard Data

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Flash Point: 12F/-11C
Flash Point Method: C.C
Lower Explosive Limit: 1.3
Upper Explosive Limit: 7.9
Extinguishing Media: DRY CHEMICAL, CO2, HALON, FOAM.
Special Fire Fighting Proc: USE NIOSH/MSHA APPROVED SCBA IN AN ENCLOSED AREA WITH FULL PROTECTION.
Unusual Fire and Expl. Hazrd.s: AVOID TOXIC VAPORS (SUSPECTED HUMAN CARCINOGEN)

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Reactivity Data

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Stability: YES
Conditions To Avoid (Stability): HEAT, SPARKS AND OPEN FLAMES.
Materials To Avoid: OXIDIZERS, ACIDS, PEROXIDES, CHLORINE, OTHER HALOGENS, METALS.
Hazardous Decomp Products: TOXIC OXIDES OF CARBONS.
Hazardous Poly Occur:
Conditions To Avoid (Poly):

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Health Hazard Data

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LD50-LC50 Mixture: ORAL RAT: 4700MG/KG
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Hazards Acute And Chronic: ACUTE: IRRITATION OF EYES, SKIN AND RESPIRATORY TRACT, BURNING SENSATION OF EYES, PULMONARY EDEMA, CNS EFFECTS, HEADACHE, NAUSEA, VOMITING, DROWSINESS, WEAKNESS, BLURRED VISION. CHRONIC: DERMATITIS, DRYING OF SKIN, CNS EFFECTS, HEMATOPOIETIC AND IMMUNE SYSTEMS, ANEMIA WHICH MAY BE HOMOCHROMIC.
Carcinogenity - NTP: YES
Carcinogenity - IARC: YES
Carcinogenity - OSHA: YES

Explanation Of Carcinogenity: KNOWN HUMAN CARCINOGEN (MYELOGENOUS LEUKEMIA).
Signs/Symptoms Of Overexposure: SEE HEALTH HAZARDS DATA.
Medical Conditions Aggravated By Exposure: PRE-EXISTING CONDITIONS MAY BE WORSENED.
Emergency/First Aid Procedures: EYES AND SKIN: FLUSH WITH PLENTY OF WATER FOR ABOUT 15 MINUTES, CALL A PHYSICIAN. INHALATION: REMOVE TO FRESH AIR; CONSULT A PHYSICIAN. INGESTION: IF CONSCIOUS, GIVE PLENTY OF WATER, CALL A PHYSICIAN IMMEDIATELY.

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Precautions for Safe Handling and Use

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Steps If Mat'l. Released/Spill: USE PROPER PERSONAL PROTECTION (SCBA NIOSH/MSHA APPROVED), DIKE, REMOVE ALL IGNITION SOURCES, USE SUITABLE INERT ABSORBENT MATERIAL, COLLECT FOR PROPER DISPOSAL, REPORT TO THE PROPER AUTHORITY AS APPLICABLE.
Neutralizing Agent: N/R
Waste Disposal Method: DISPOSE OF COLLECTED MATERIAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
Precautions-Handling/Storing: STORE IN COOL, DRY AND WELL VENTILATED AREA; FOLLOW BONDING/GROUNDING INSTRUCTIONS FOR THE CONTAINERS.
Other Precautions:

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Control Measures

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Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR FOR BENZENE VAPORS/MIST OR SCBA IF ABOVE PEL/TLV.
Ventilation: LOCAL EXHAUST TO MAINTAIN PEL/TLV (EXPLOSION PROOF).
Protective Gloves: IMPERVIOUS.
Eye Protection: SPLASH PROOF GOGGLES.
Other Protective Equipment: FULL PROTECTIVE CLOTHING, EYE-WASH/SAFETY SHOWER.
Work Hygienic Practices: AVOID CONTACT WITH EYES AND SKIN; DO NOT BREATHE VAPORS/MIST; THIS CHEMICAL IS HUMAN CARCINOGEN; USE FULL PROTECTION.
Suppl. Safety & Health Data: THIS NSN REPLACES
NSN: 6810-00-257-2418 (CANCELED ON 79305).

Enclosure (2) to COMDTINST 6260.21B

GENERAL CATEGORIES OF HAZARDOUS MATERIALS
AND BY-PRODUCTS FOUND IN THE COAST GUARD

1. Hazardous Materials.

| General Category | Federal Supply Class |
|---|---|
| Acids | 6810 |
| Adhesives (glues) | 8040 |
| Chemicals | 6810, 6850 |
| Cleaners, Degreasers (water/solvent based) | 6810, 6850, 7930 |
| Coatings (paints, varnishes, etc.) | 8010 |
| Coatings Removers | 8010 |
| Coatings Thinners | 8010 |
| Fluxes | 3439 |
| Fuels | 9130 |
| Lubricants (oils, greases) | 9150 |
| Pesticides (herbicides, insecticides) | 6840 |
| Preservatives, Sealing Compounds | 8030 |
| PCBs | 6120, 5910 |

For personnel engaged in marine safety activities, also include chemicals and materials listed in the CHRIS manual (COMDTINST M16465.12(series)).

2. Hazardous By-products.

| By-product | Type of Operation |
|---|---|
| Crystalline free silica dust | Blasting with beach sand, |
| Zinc, cadmiun, or lead fume | torch cutting coated metals |
| Ozone | Welding or torch cutting aluminum |
| Nickel or chromium fume | Welding or torch cutting stainless steel |
| Hydrogen chloride gas | Smoking when working with chlorinated solvents |
| Nitrogen doixide gas | Oxy-acetylene torch cutting |
| Asbestos dust | Insulation removal |

# HAZARD COMMUNICATION FOR WORKPLACE MATERIALS
# SAMPLE WRITTEN PROGRAM

The following written hazard communication program has been established for:

(UNIT NAME)

to comply with the requirements of Federal law (29 CFR 1910.1200) and Commandant Policy (COMDTINST 6260.21A) The commanding officer has the primary responsibility for the unit hazard communication program. Functional responsibility has been delegated to:

(PERSON OR POSITION)

who has been designated as the Unit Hazardous Materials Coordinator.

The written program is available at the following location for review by personnel, their designated representatives, and, upon request by the Occupational Safety and Health Administration and National Institute for Occupational Safety and Health:

(LOCATION)

1. Inventory List of Chemicals.
   Attached to this written program is a list of all known hazardous material to which the personnel of this unit may be exposed in the performance of their work activities. More detailed information on each listed hazardous material can be obtained by reviewing its Material Safety Data Sheet (MSDS). The inventory list is located at:

   (LOCATION)

2. Container Labeling.
   All containers received for use must be checked for appropriate label or tags providing the following information:

   a. Name of the material as given on the MSDS;

   b. Warning of principal hazard(s), (e.g., health, fire, reactivity, etc.);

2. c. Effects of overexposure on target body organs (e.g., eyes, skin, liver, kidneys, etc.) and;
   d. Name, address or location of the manufacturer, supplier or responsible party who can provide additional information.

   The unit hazardous materials coordinator is responsible for ensuring that containers are properly labeled or tagged.

3. Material Safety Data Sheets.
   Copies of Material Safety Data Sheets (CHRIS sheets for Marine Safety units) for all hazardous materials to which personnel may be exposed will be maintained at:

   (LOCATION)

   The unit hazardous materials coordinator should be contacted if a Material Safety Data Sheet (CHRIS sheet) is not available for any hazardous material appearing on the attached inventory list.

4. Employee Training.
   Each employee shall receive information and training on the elements of the hazard communication program. The information and training will cover:

   a. An overview of the elements of the Coast Guard Hazard Communication Program;

   b. Location and availability of the written hazard communication program, inventory list(s), and Material Safety Data Sheets;

   c. Contents of Materials Safety Data Sheet with emphasis on:
      - work operations where materials are used
      - hazards presented
      - safe work practices required
      - protective measures to be taken
      - emergency first aid procedures to be followed

   d. Instruction on interpreting labels.
      Additional information about hazard communication training and information can be obtained from the unit hazardous materials coordinator. Document training in the unit training record and in individual USCG Training Records.

5. Non-routine Tasks.
   The performance of non-routine tasks is included in the scope of the hazard communication program. The potential for exposure to hazardous materials must be anticipated prior to beginning work on such projects. The unit official who has supervisory authority for the non-routine task is responsible for ensuring employees receive appropriate hazard information.

6. On-site Contractors.
   The unit hazardous materials coordinator will provide MSDS information to contractors whose employees perform work activities within unit facilities if hazardous materials are provided by the Coast Guard. Information provided by the unit must be sufficient to enable the contractors to satisfy their hazard communication responsibilities.
   (ATTACH HAZARDOUS MATERIALS INVENTORY LIST HERE)

Enclosure (4) to COMDTINST 6260.21B

## LIST OF HIGHLY TOXIC MATERIALS

| CHEMICAL NAME | CHRIS CODE | CFR | TLV-TWA PPM | STEL PPM | IDLH PPM |
|---|---|---|---|---|---|
| Acrylonitrile | CAN | 0 | 2 | -- | 4000 |
| Benzene | BNZ | 0 | 10 | 25 | 2000 |
| Benzene, Toluene, Xylene Mixture | BTX | 0 | 10 | 25 | 2000 |
| Butadiene (1,3 Butadiene) | BDI | -- | 10 | 15 | 20000 |
| Butadiene, Butylene mix with Acetylenes | BBM | 0 | 10 | 15 | 20000 |
| Chloroform | CRF | 0 | 10 | 50 | 1000 |
| Ethylene Dibromide | EDB | 0 | -- | -- | 400 |
| Ethylene Oxide | EOX | 0 | 1 | -- | 800 |
| Formaldehyde Solution | FMS | 0 | 1 | 2 | 100 |
| O-Toluidine | TLI | 0 | 2 | -- | 100 |
| Vinyl Chloride | VCM | 0 | 5 | -- | 500 |